

Name: _____

Weathering vs. Erosion

25 pts

Landslide Video Guide

Directions: Follow along with the video on landslides. Fill in the answers to the questions as they are covered in the video. (<http://www.youtube.com/watch?v=mknStAMia0Q>)

- 1.) When do landslides occur?

- 2.) In the United States, in which states do landslides occur?

- 3.) Landslides follow which types of natural disasters?

- 4.) Where do landslides occur?

- 5.) In 1998 in Southern California, what caused the ground to erode away?

- 6.) Why are landslides such a serious threat?

- 7.) Are landslides an example of weathering or erosion?

Lab Experiment

Directions: Groups will be given containers with solutions of water, vinegar, and hydrochloric acid. Students will also be provided with antacids, chalk, and pennies. Start by placing an antacid tablet in each of the solutions A, B, and C. Compare the reactions of the object in the three different solutions and write down your observations after **2 minutes**. Then repeat this procedure for the remaining 2 objects. Answer the analysis questions when you are finished recording your observations and have cleaned up your materials.

Note:

- Only 3 containers (one of EACH solution) should be open at any given time
- Students must wear goggles at ALL times as these solutions may cause eye and skin irritation
- Make sure to clean up any spilled solution

Trial 1: Antacid Tablets

Solution	Object	Reaction / Observation
Beaker A: Water	Antacid Tablet	
Beaker B: Vinegar	Antacid Tablet	
Beaker C: Hydrochloric Acid	Antacid Tablet	

Trial 2: Chalk

Solution	Object	Reaction / Observation
Beaker A: Water	Chalk	
Beaker B: Vinegar	Chalk	
Beaker C: Hydrochloric Acid	Chalk	

Trial 3: Penny

Solution	Object	Reaction / Observation
Beaker A: Water	Penny	
Beaker B: Vinegar	Penny	
Beaker C: Hydrochloric Acid	Penny	

Analysis Questions:

- 1.) Compare what happened when the antacid was placed in the vinegar solution and the hydrochloric acid solution.
- 2.) Which solution caused the greatest reaction to the antacid tablets?
- 3.) Compare what happened when the chalk was placed in the vinegar solution and the hydrochloric acid solution.
- 4.) Which solution caused the greatest reaction to the chalk?
- 5.) Compare what happened when the penny was placed in the vinegar solution and the hydrochloric acid solution.
- 6.) Which solution caused the greatest reaction to the penny?
- 7.) Which is a stronger acid, the vinegar or the hydrochloric acid? Support your reasoning with your data.
- 8.) In this lab experiment, did your group model erosion or weathering processes? If weathering, were these mechanical or chemical weathering processes? Explain your answer.